Building 124 and 129 Close Out Report

Description of Operations, Functions and Closure

Building Operations and Functions

Building 124 was the water treatment plant for Rocky Flats, a non-transient non-community public water system operated under State of Colorado Permit CO0230055. It had a design capacity of 0.72 MGD, using flocculation/sedimentation and single media rapid sand gravity filtration to treat the potable water supply. Raw water was supplied by the Denver Water Board, primarily from Ralston Reservoir, and delivered via pipeline to a 1.5 MG raw water pond along the west access road. Chemical addition included a flocculent to aid in solids removal, calcium hypochlorite for disinfection and zinc orthophosphate for corrosion control. Building 129 was adjacent to the main filtration facility and housed the microstrainer that filtered the raw water as first entered the treatment process. Finished water was stored in a 0.25 MG clearwell located below Building 124 and extended southward. From the clearwell, finished water was transferred to either a 0.5 MG ground tank (215B) or the 0.3 MG water tower (215A), and then into the distribution system.

Solids removed by filtration were back washed into two concrete basins located on the east side of B124. Two additional basins were used for drying the removed solids. Residuals were disposed of as sanitary waste.

The demolition of B124 and B129 included removal of the sand filtration (124) and microstrainer (129) operations, as well as the water tower (215A) but did not include the removal of the ground tank (215B) or the newly installed pump skid building (T124G), which remain in service to pump raw water into the distribution system. Raw water is used for fire suppression and dust control, and will remain in service until the final building demolition is complete. A separate close out report will be prepared for T124G, the ground tank and distribution header.

Building Utilities

Building 124 was supplied with electrical power, steam service, telephone, fire alarms, wireless alarms, and sanitary sewage service. All utilities were disconnected from the buildings prior to demolition, and, in the case of the sanitary sewage, the service lines were grouted. Steam service provided heat to the building; the steam lines were insulated with asbestos containing material (ACM), which was removed and disposed of before building demolition (see Figure 2). Approximately 15 cubic meters of ACM were removed from B124. Site drawings indicated that there was a storm drain that ran south from B124 to an outfall along the southern edge of the industrial area into the Woman Creek drainage. No evidence of this storm sewer was found during the demolition of the building. The line was apparently abandoned and removed sometime in the past and the removal was not recorded on utility drawings.

Building Foundation Removal and Clearwell Disposition

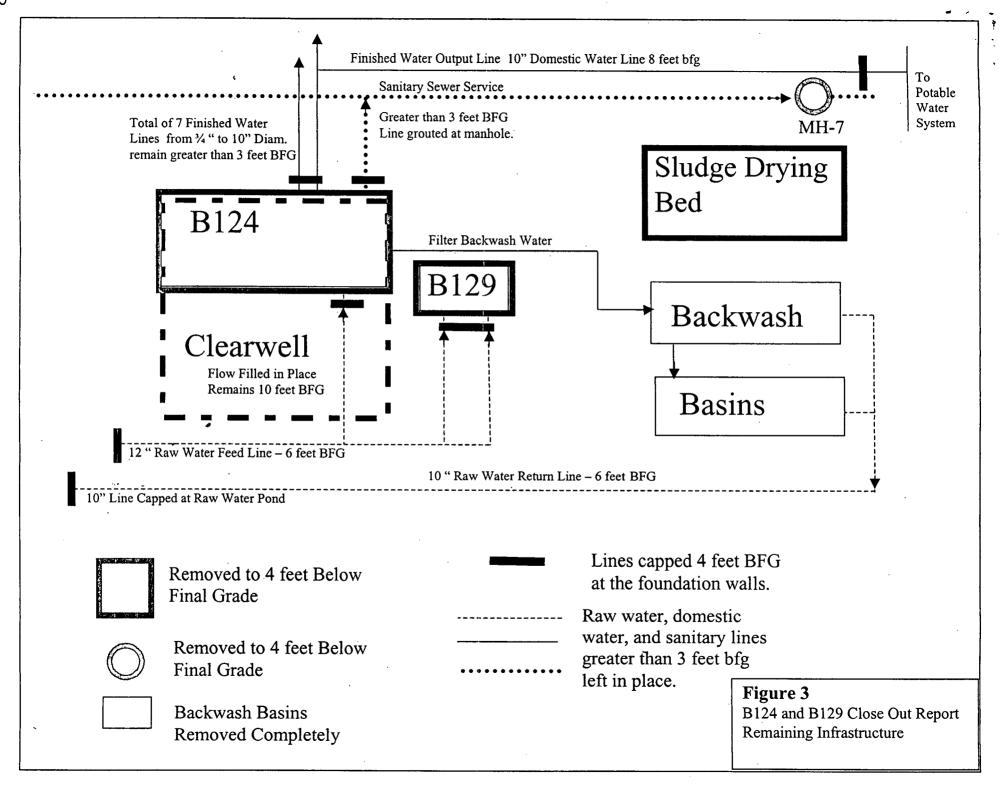
All of the structure of B124 and B129 was removed to 4 feet below final grade (bfg). Likewise, the backwash basins were removed to 4 feet bfg. The solids drying beds were shallow structures and were removed completely. The foundation drain association with B124 was left in place with the lower portion of the building. The major pipelines connected to B124 were the raw water influent, the finished water effluent, sanitary service, and a raw water return line connection to the backwash basins. All connections to B124 were cut at the foundation of the building and the lines were capped. The main raw water influent line was excavated southwest of B124 and capped, and the raw water return line was capped at the raw water pond. There were a total of 7 finished water lines leaving B124 along the north side, ranging in size from ¾ inch to 8 inches. They exited the building up to 9.5 feet bfg. These lines were capped on the inside



of the building prior to demolition. The sanitary collection system included a 6 inch line that ran from B124 eastward and a manhole along the east side of the B124 area; the manhole was grouted and removed to 4 feet bfg. Figure 3 shows the remaining infrastructure at the end of demolition.

In preparation for the demolition of B124, options were considered for the final configuration of the clearwell. The entire clearwell measured 71'X64'X10' – a volume of 45,440 cu. ft. Half of the clearwell was below B124 and the other half extended south of the building; the entire clearwell was about 10 feet below grade. The roof of the south half of the clearwell was 12 inches thick while that above the north half was only 5 inches thick. Ultimately, it was agreed that the entire volume of the clearwell would be filled with Flow Fill, which was completed as part of the demolition.





Nesta, Stephen

From:

Myers, Kim

Sent:

Tuesday, June 28, 2005 8:00 AM

To:

Fiehweg, Robert E.

Cc:

Nesta, Stephen

Subject:

FW: B124 & 129 Closeout Report

Bob.

Can you please address these comments and prepare a Memo that will be submitted to answer.

----Original Message----

From:

David Kruchek

Sent:

Friday, June 24, 2005 1:45 PM

To:

Myers, Kim

Cc:

Freiboth, Cameron; Nesta, Stephen; Steve Gunderson

Subject:

B124 & 129 Closeout Report

Regarding this closeout report, even though these may be Type 1 Facilities, there still needs to be provided a figure that shows the remaining infrastructure (building, tanks, sumps, beds, lines, drains, etc.) as well as a discussion of the removed and remaining infrastructure, including the condition of the remaining infrastructure (filled, plugged, grouted, etc), in the report. Please modify this report to include this discussion and figure. Also, there is supposed to be a foundation drain system that flows to a sump on the east side of B124 and storm drain that was used to discharge water from this site to the southeast, which needs to be shown and discussed. In addition, it can not be determined from Figure 2 what lines, manholes, manways, drains, etc. remain and what was removed, please modify as appropriate.

4 copies

1. Morjan

2. hruchek

3. AR

4. Our Filor

